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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/818,860	03/28/2001	Kouichi Takagi	109086	3932
25944	7590	11/21/2003	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			LEJA, RONALD W	
			ART UNIT	PAPER NUMBER
			2836	

DATE MAILED: 11/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/818,860

Applicant(s)

TAKAGI

Examiner

Ronald W Leja

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3/28/01 6) ☐ Other:

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1. The Drawings are objected to because Fig.s 1-3 contain Foreign language wording and need to be labeled in English. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The Abstract of the Disclosure is objected to because it needs to be in a single paragraph form with parentheticals. The legal phraseology needs to be removed, i.e. "means". Correction is required. See MPEP § 608.01(b).

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakamura et al. (4,323,837).

Nakamura et al. disclose an engine-driven alternator (1), which charges a battery (3) having output means for driving various loads (6). The alternator output is dependent upon the rpms of the engine and power generation control means (7, 8, 10) detects (7) the current amount from the battery (3) and sets the number of engine rpms (8) (see Col. 3, lines 29-31). When the detected voltage (actually current magnitude drawn) from the battery to the loads exceeds a predetermined value, (at idle speed), the number of engine rpms are

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set accordingly (see Col. 3, lines 29-31) and the engine control means (9) controls the engine rpms set by (8). As far as Claim 4, the loads include headlights, air conditioning, window wipers and stereo.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al..

Addressing Claim 2, it is not clear whether Nakamura et al. teach "only during detecting the current amount over the current immediately before exceeding the current amount of the electric power generated in the usual idling state" that the power generation control means transmits the set number of engine rpms. However, the battery current output is disclosed as being detected at engine idle speed and when a threshold is exceeded the set number of rpms (via 8) is transmitted to the engine control means (9). This is done so as to protect the battery from being exhausted or depleted of charge and that the alternator being engine-driven needs to be driven higher so as to compensate for the battery drain. It is therefore, the opinion of the Examiner, that it would have been obvious to set the threshold detection amount over the current immediately before exceeding the current amount of the electric power generated in the usual idling

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state, thereby, preventing any increased drain upon the battery by the loads. This would lead to extended battery performance, such as, increasing the amount of time that loads can be driven by the battery when the vehicle is in an OFF condition, since the alternator would be driven at a higher duty cycle or rate when the threshold is exceeded and this threshold would correspond to the alternator's current output at idle speed. During idle speeds, the drain from loads upon the battery would be minimal.

7. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a Statement of Reasons for the Indication of Allowable Subject Matter: The Prior Art of Record does not appear to disclose nor suggest the claimed combination found within Claim 3, which includes the finding of the difference between the set number of engine revolutions and the number of engine revolutions in the usual idling state and transmitting the difference to the engine control means, when the detected current exceeds the threshold.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald W Leja whose telephone number is (703) 308-2008. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (703) 308-

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3119. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Ronald W. Leja
Ronald W Leja
Primary Examiner
Art Unit 2836

11/17/03

rwl
November 17, 2003